

Title (en)

SYSTEMS, APPARATUS, AND METHODS FOR TRANSPORT AND DELIVERY OF THERAPEUTIC SUBSTANCE TO MIDDLE EAR

Title (de)

SYSTEME, VORRICHTUNG UND VERFAHREN ZUM TRANSPORT UND ZUR ABGABE EINER THERAPEUTISCHEN SUBSTANZ AN DAS MITTELOHR

Title (fr)

SYSTÈMES, APPAREIL ET PROCÉDÉS POUR LE TRANSPORT ET L'ADMINISTRATION D'UNE SUBSTANCE THÉRAPEUTIQUE À L'OREILLE MOYENNE

Publication

EP 3746018 A1 20201209 (EN)

Application

EP 19708913 A 20190201

Priority

- US 201862625933 P 20180202
- US 2019016389 W 20190201

Abstract (en)

[origin: WO2019152866A1] Systems, apparatus, and methods are described for transporting and delivering a therapeutic substance to an ear of a subject, including a tubular element (216) configured for deployment in a tympanic membrane (TM) and a fluid transport element (230). The fluid transport element can be configured to transport the therapeutic substance from a proximal side to a distal side of the tubular element. Systems, apparatus, and methods further can include a fluid dispenser including a reservoir configured to contain a therapeutic substance, and a tubular element defining a lumen in fluid communication with an outlet in which the lumen and the outlet are configured to deliver the therapeutic substance from the reservoir to a region proximal to the tympanic membrane. Systems, apparatus, and methods further can include an electrode device.

IPC 8 full level

A61F 11/00 (2006.01)

CPC (source: EP US)

A61F 11/202 (2022.01 - EP); **A61M 31/00** (2013.01 - US); **A61F 2250/0068** (2013.01 - EP); **A61M 31/00** (2013.01 - EP); **A61M 2205/0233** (2013.01 - US); **A61M 2205/35** (2013.01 - US); **A61M 2210/0668** (2013.01 - US)

Citation (examination)

- US 2014094733 A1 20140403 - CLOPP MATHEW D [US], et al
- US 6120484 A 20000919 - SILVERSTEIN HERBERT [US]
- US 6440102 B1 20020827 - ARENBERG IRVING K [US], et al
- See also references of WO 2019152866A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019152866 A1 20190808; CN 111542288 A 20200814; CN 111542288 B 20230808; EP 3746018 A1 20201209; US 11806493 B2 20231107; US 2021052868 A1 20210225

DOCDB simple family (application)

US 2019016389 W 20190201; CN 201980007098 A 20190201; EP 19708913 A 20190201; US 201916964773 A 20190201